XP-002256825

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AP - JP19950144406 19950612
CPY - MITV
DC - B04
FS - CPI
IC - C07B63/00 ; C07K1/18 ; C07K1/22
MC - B04-H19 B04-L01 B04-N04
M1 - [01] M423 M720 M903 N164 V752
M2 - [02] A220 A940 B115 B701 B713 B720 B815 B831 C101 C108 C550 C730 C802 C804 C805 C807 M411 M781 M903 M904; R03521-U
PA - (MITV) MITSUBISHI MATERIALS CORP
PN - JP8333387 A 19961217 DW199709 C07K1/18 004pp
PR - JP19950144406 19950612
XA - C1997-030580
XIC - C07B-063/00 ; C07K-001/18 ; C07K-001/22
AB - J08333387 Isolation and purificn. of protein by ion exchange absorption and sepn., in which a protein contg. soln. is contacted with hydroxyapatite treated with a metal salt or phosphate soln., to selectively absorb and separate acidic or basic protein.
- The hydroxyapatite prepd. by baking at temps. of 1,000 deg.C or lower. Hydroxyapatite is baked at temps. of at most 1,000 deg.C, pref. 800-1,000 deg.C and pulverised to 5-500 micron, particles. Then, the baked hydroxyapatite is contacted with a metal salt soln. (e.g. Ca, Mg, Na, K, Mn, Li, Ni, Cu, Zn, Fe and Ag, pref. Ca and Mg ions) at concns. of 2 mM or less, pref. 1-2 mM.
- ADVANTAGE - Selective and ion exchange absorption and sepn. of acidic or basic protein by simple method.
- In an example, hydroxyapatite particles having 50-150 micron sizes were baked at 900 deg.C and filled in a column of 0.9 cm diameter and 15 cm length. The column was equilibrated with 30 mM potassium phosphate buffer and a mixt. of albumin (BSA), fibrinogen, lysozyme and cytochrome having isoelectric point (p1) of 4.7, 5.6, 10.8 and 10.6, respectively, was poured. Then, the column was linear gradiently developed with 0.03-0.35M potassium phosphate buffer to selectively absorb lysozyme and cytochrome without absorbing albumin or fibrinogen.
- (Dwg.1/2)
CN - R03521-U
IW - ISOLATE PURIFICATION PROTEIN ION EXCHANGE ABSORB HYDROXY APATITE
IKW - ISOLATE PURIFICATION PROTEIN ION EXCHANGE ABSORB HYDROXY APATITE
NC - 001
OPD - 1995-06-12
ORD - 1996-12-17
PAW - (MITV) MITSUBISHI MATERIALS CORP
TI - Isolation and purificn. of protein - by ion exchange and absorption using hydroxy:apatite